



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,425	03/30/2001	Rajaiah Karanam	03PM-9035	3222
6152	7590	06/15/2004	EXAMINER	
PATENT OPERATION GENERAL ELECTRIC COMPANY 41 WOODFORD AVENUE PLAINVILLE, CT 06062			CHARIOUI, MOHAMED	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/681,425

Applicant(s)

KARANAM ET AL.

Examiner

Mohamed Charioui

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-8,10-13,15-21,23-32 and 34-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-8,10-13,15-21,23-32 and 34-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant canceled claims 1, 4, 9, 14, 22 and 33.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 13, 19-21 and 23-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Sneeringer (U.S. 6,618,709).

As per claims 13 and 19-21, Sneeringer teaches a plurality of electrical usage monitoring devices, each of the plurality of monitoring devices collecting information related to electric usage in a discreet location (see col. 11, line 59 to col. 12, line 24 and Fig. 4); a server connected to communicate with the plurality of monitoring devices (see col. 12, lines 8-58); a database object coupled to the server, the database object storing the electrical usage information received from the plurality of monitoring devices (see col. 6, lines 12-36); an analysis object coupled to the database for analyzing the electrical usage information (see col. 6, lines 36-45); a comparator object coupled to the database object, the comparator object periodically comparing the electrical usage information of each of the plurality of monitoring devices and a predefined electrical rate profile (see col. 6, lines 12-45); and, a reporting object coupled to the database object

and the analysis object (see col. 5, lines 50-61; col. 7, lines 55-62; and col. 17, line 51 to col. 18, line 19).

As per claims 23-28, Sneeringer further teaches that the communications device is a wireless type (see col. 7, lines 38-54).

As per claims 29 and 31-36, Sneeringer further teaches a current sensor (see col. 23, lines 30-37); a meter coupled to the current sensor, the current sensor providing a signal to the meter indicative of the current (see col. 23, lines 30-37); a storage device associated with the meter, the meter storing electrical usage information on the storage device (see col. 23, lines 30-37); a communications device coupled to the meter; a server coupled to the communications device (see col. 38-49), the communications device periodically transmitting the usage information to the server (see col. 6, lines 7-36); and a means associated with the server for reporting electrical usage; wherein the reporting means is a software module (see col. 7, lines 55-62; and col. 17, line 51 to col. 18, line 19), the software module including a database object, an analysis, a comparator object, and a reporting object (see col. 6, lines 12-45 and col. 23, lines 37-49).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 5, 2, 3 and 6-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Turino et al. (U.S. 5,994,892) in view of Sneeringer (U.S. 6,618,709).

Art Unit: 2857

Turino at el. ^{teach} an enclosure (see col. 15, lines 24-46); at least one current transformer within the enclosure (see col. 15, line 44 to col. 16, line 10); a meter connected to the current transformer (see col. 15, line 46 to col. 16, line 10); a communications device connected to the meter (see col. 9, lines 25-30).

Turino et al. do not explicitly teach a server connected to the communications device and a software module coupled to the server, wherein the software module includes a database object, the database including electrical usage information; an analysis object coupled to the database for analyzing the electrical usage information.

Sneeringer teaches this feature (see col. 22, lines 9-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Sneeringer's teaching into Turino et al.'s invention, because it would communicate data to the server for analysis and computations. Therefore, computations and analysis of the data would be performed with quality and in a timely manner.

Turino et al. do not teach a comparator object coupled to the database object, wherein the comparator object periodically comparing the electrical usage information and a predefined electrical rate profile.

Sneeringer teaches this feature (see col. 6, lines 12-45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Sneeringer's teaching into Turino et al.'s invention, because it would provide a comparator object that would periodically compare the electrical usage data to a predefined electrical rate profile. Therefore, the cost of the energy consumption would

be monitored periodically and decision about using the energy efficiently would be made.

Turino et al. do not teach a reporting object coupled to the database object and the analysis object.

Sneeringer teaches this feature (see col. 5, lines 50-61; col. 7, lines 55-62; and col. 17, line 51 to col. 18, line 19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Sneeringer's teaching into Turino et al.'s invention, because it would provide the consumer with the information concerning its electrical usage. Therefore, the consumer would have a clear and concise idea how the power should be consumed in his site or premises in order to save electrical power and reduces the overall costs of its consumption.

4. **Claims 10-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Turino et al. in view of Sneeringer and Delaney (U.S. 5,541,589).

Turino et al. in view of Sneeringer teach the system as stated above except determining a maximum electrical cost period.

Delaney teaches this feature (see col. 7, lines 60 to col. 8, line 19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Delaney's teaching into Turino et al. in view of Sneeringer's teaching, because it inform the consumer of the maximum electrical cost period. Therefore, the consumer would reduce the electrical usage over this period of time in order to reduce the costs of the electrical usage.

5. **Claims 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Sneeringer view of Delaney.

Sneeringer teach the system as stated above except determining a maximum electrical cost period for each of the plurality of monitoring devices.

Delaney teaches this feature (see col. 7, lines 60 to col. 8, line 19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Delaney's teaching into Sneeringer's teaching, because it inform the consumer of the maximum electrical cost period. Therefore, the consumer would reduce the electrical usage over this period of time in order to reduce the costs of the electrical usage.

Prior art

6. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

Ehlers et al. ['032] disclose energy management and building automation system.

Suh et al. ['536] disclose Internet ready, energy meter business method.

Boies et al. ['309] disclose system and method to monitor datamining power usage.

McNelly ['803] disclose slew rate based power usage simulation and method.

Shincovich et al. ['179] disclose remote automatic meter reading apparatus.

Response to Arguments

7. Applicant's arguments with respect to claims 2, 3, 5-8, 10-13, 15-21, 23-32 and 34-36 have been considered but are moot in view of the new ground(s) of rejection.

Contact information

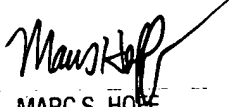
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Charioui whose telephone number is (571) 272-2213. The examiner can normally be reached Monday through Friday, from 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohamed Charioui

6/2/04


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800